Supering

WHEN? HOW MANY? COMB or FOUNDATION? SUPER SIZE? 9 or 10 FRAMES? QUEEN EXCLUDER or HONEY EXCLUDER? HARVEST TIME? PROTECTING COMB?

Year after year, all of these points are answered, books are filled with pages of information, my previous PINK PAGES are old and voluminous, but every year, it seems like every beekeeper in APRIL still has questions about two things: Income Taxes and Supering. The great majority of you do NOT have a scale hive like some of us have to tell the exact moment a nectar flow "comes to life" for OUR apiary, not YOURS. So What? A super should be in place BEFORE a nectar flow starts in order to provide space for bees to move honey or initial nectar OUT of the BROOD chamber so the queen has laying space. In the Washington, DC area, this will be around Cherry Blossom Festival time or our first abundant dandelion bloom which is about the 2nd week in April. For many years, I have supered on April 15th.

I remind you that the period before the real nectar FLOW is SWARM SEASON and many a swarm might not have been lost, if a super was in place a week or so before the nectar flow starts to prevent BROOD CHAMBER CONGESTION, the Number ONE cause of swarming. What good is that super sitting in your garage or basement?

For many years, beekeepers added another super when the first super was about half or 2/3 full, maybe due to lack of supers, lack of research to investigate this, or more likely "it was the way that Daddy did it". However, since migratory beekeeping has become popular and the US Dept. of Agriculture has researched supering techniques during the past few decades, research has clearly shown that due to the "hoarding" instinct of the honey bee, the placement of several supers of DRAWN COMB (NOT foundation) on a colony all at one time results in more honey production and less swarming during a nectar flow than adding one super to another as they are needed. I put 5 Illinois supers of DRAWN COMB on each colony on or before April 30th. Page 618 of the 1992 Revised Edition of The Hive and Honey Bee agrees and recommends the use of multiple supers of drawn comb rather than single supering.

It is very apparent from questions asked and statements made that many beekeepers just do not understand the bee's need of STORAGE SPACE. Many are puzzled by knowing that their bees will normally produce about 3 supers of honey during April, May, and early June, why then should a colony have 4 or 5 supers in place during the entire nectar flow? Honey bees do NOT collect thick, viscous honey which is only about 18% water and bring it to the hive and super it. They collect thin, slippery nectar which might be 80% water and bring it to the hive to STORE it until they can ripen (cure) it and reduce its volume from 80% to 18% water, hence making honey. Storing all this thin watery nectar requires a lot of storage space, and if there is none present in the hive, first the bees will build lots of burr comb even partially filling up bee space and then, THEY WILL SWARM!

Swarming during a nectar flow is TOTALLY DIFFERENT than a swarm in that "swarm season" just before the nectar flow which is primarily due to brood chamber congestion. A swarm

produced during a nectar flow is caused by a single problem - LACK OF STORAGE ROOM FOR THE NECTAR. Such a swarm is 100% FAULT OF THE BEEKEEPER in failure to provide enough super space, and that space when the bees needed it!

I have written ad nauseum that FOUNDATION is NOT the same as drawn comb, and has to be used with a totally different technique. You must not have more than one super of 10 frames of foundation on a colony at any time, because the bees will make holes in some, only draw the center frames and ignore the side frames, or only partially draw some frames - all of this resulting in a MESS. If you do not have adequate drawn comb and have to use Foundation, you wait until the top super is about 1/3 to 1/2 filled with nectar and then add another super of 10 (never 9) frames of foundation on top of the partially filled super, and repeat as necessary.

Many good beekeepers only use 9 frames properly spaced in a super because the drawn frames are wider (thicker) and makes upcapping easier; but you can do this with frames of drawn comb ONLY, and never, ever, with foundation!

Some are confused about the definition of a super and the various sizes of these supers. A super is a box of frames used to store honey only, and hence, it is SUPER imposed on the top of the brood chamber area. Any size hive body that you like can be used as a super. Many migratory beekeepers who have young strong employees use the standard deep 9 1/8" frame in a deep hive body as a super; but when filled, it weighs about 90 pounds (and if it is the top body, full of bees too, a hot humid day, and 100' carry to your truck, you will swear that it weighs 200 pounds.) I use the popular medium (Illinois) 6 1/4" frame in a medium (Illinois) 6 5/8" super body, and when filled with honey, it weighs about 50 pounds. The last size used for extracted honey is the Shallow 5 3/8" frame in a Shallow 5 11/16" super body and when filled with honey, it weighs about 40 pounds; but this Shallow Size, while still in use, is rapidly being replaced by the medium (Illinios) size.

In recent years, many beekeepers have switched to using the 6 5/8" medium (illinois) body for everything: brood and honey. By doing this, all bodies and all frames are interchangeable because everything is ONE SIZE. I switched 15 years ago (wish I had done it 66 years ago) and now always have the correct size frame for everything. I predict that this will be the standard hive in our next century (not affected by the Y2K syndrome either).

Many of the "old time" beekeepers refused to use a queen excluder, referring to them as "honey excluders" because they believed that the bees have a difficult time going through an excluder. Research has never been able to confirm this; and the great majority of beekeepers of today use excluders. Back in the days before the Japanese attack on Pearl Harbor, I did not use an excluder because I was primarily raising 4" x 4" Square Section Comb Honey and queens do like to be confined to these small areas. However, when I started doing research about bee behavior and management techniques, I used queen excluders because I wanted to specifically limit the queen to my selection of her location. I firmly believe in the advantages of using an excluder for all beekeeping; and I much prefer the wood bound excluder to the newer metal bound or plastic excluder because I have seen the thin metal bound or plastic excluders violate bee space and cause burr comb. Also, wood bound excluders (I paint them RED) are quite visible from an outside view

of a colony, whereas a thin excluder might not be seen and left on a colony by mistake maybe resulting in a dead queen.

In our Maryland area, there is little if any saleable honey made after about June 10th in most years. I harvest before July 4th by using a fume board with benzaldehyde, and/or an air blower, but only extract frames that are 90% capped. Those frames that are not fully capped are put back in supers and put back on my strongest colonies, and these can be extracted later if needed or left for winter feed if you feel you might want a backup supply.

Remember that drawn comb is a beekeepers most valuable possession, so CAREFULLY protect your extracted frames. in the paragraph above, I mentioned frames of UNcapped honey being placed back on strong colonies. Keeping the INNER COVER in place on top of those uncapped frames, put the supers of dripping wet extracted frames on top of the inner cover and seal the top super shut to prevent robbing with a double screen plus a telescoping cover and leave everything in place for about a week. Those extracted frames should then be completely empty, clean of honey, and dry; and, if so, remove them and take them to your basement, your garage, or garden house. Stack them tightly and treat them with para-dichloro-benzene (PDB), and seal them up so that the wax moths are killed. These may have to be retreated with PDB every 30 days until it gets cold in November; but PROTECT THAT DRAWN COMB!

This covers most details about supering, and I hope it is useful to you.

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